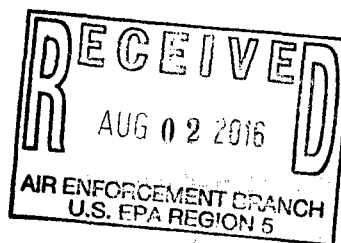




July 27, 2016

Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC40)  
Post Office Box 19276  
Springfield, Illinois 62794-9276



**Subject: Semi-Annual Monitoring System Performance Report for Sterigenics - Willowbrook, IL Facilities – Permit ID #043110AAC/Summary Report-Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance**

Dear Compliance Section:

This letter constitutes the semi-annual monitoring and summary report for Sterigenics Willowbrook, Illinois facilities. This report is intended to satisfy semi-annual reporting requirements in our current air permit. This report is organized by reporting requirements required by 40 CFR 63.366 (a)(3) and permit condition.

Summary Report for Sterigenics' facilities located at 7775 Quincy Street, Willowbrook, IL and 830 Midway Drive, Willowbrook, IL. These two facilities are combined in Permit #043110AAC.

**Reporting Period Dates:**

01 January 2016 to 30 June 2016

**Description of Process Units:**

The facility process units are sterilization process chambers of various size using ethylene oxide and propylene oxide gases as the sterilant. The sterilization process chamber vacuum pump emissions are vented to the DeOxx Scrubber for Willowbrook I and to the AAT Scrubber for Willowbrook II. The aeration rooms are vented to the AAT Scrubber for Willowbrook I and II. Back vents are uncontrolled.

**Emission and Operating Parameter Limitations Specified in Relevant Standards:**

<b><u>Control Device:</u></b>	<b><u>Control Parameter</u></b>	<b><u>Limitations/Standards</u></b>	<b><u>Deviations</u></b>
DeOxx Scrubber WB I	Scrubber Glycol Solution Liquor Level	Record Weekly, must be less than 5,200 gallons.	None
AAT Scrubber WB I	Scrubber Glycol Solution Liquor Level	Record Weekly, must be less than or equal to 160"	None
AAT Dry Bed Analysis WB I	Dry Bed Emission Outlet Concentration	Record Weekly, must be less than 1 ppm	None
AAT Scrubber WB II	Scrubber Glycol Solution Liquor Level	Record Weekly, must be less than 202"	None
AAT Dry Bed Analysis WB II	Dry Bed Emission Outlet Concentration	Record Weekly, must be less than 1 ppm for Aeration and 60 ppm for Vacuum Pump Discharge	None

**Monitoring Equipment Manufacturers and Model Numbers:**

N/A. There is no CMS monitoring equipment.

**The date of the latest CMS certification or audit:**

N/A. There is no CMS monitoring equipment.

**The Total Operating Time of the Affected Source During the Reporting Period:**

**Willowbrook I DeOxx and AAT Scrubber**

- Total operating time = 4,350 hours and 42 minutes**
- Two planned outages totaling 15 hours and 07 minutes.
  - Four outages totaling 2 hours and 11 minutes.

**Willowbrook II AAT Scrubber**

- Total operating time = 4,299 hours and 24 minutes**
- Two planned outages totaling 26 hours and 50 minutes.
  - Ten outages totaling 41 hours and 46 minutes.

**Emission Data Summary: There were no excess**

Control Unit	Total Duration of Excess Emissions/quantity released	Excess Emission Duration by Cause (hours)				
		Startup/Shutdown	Control Equipment Problems	Process Problems	Other Known Causes	Unknown Causes
DeOxx Scrubber WB I	None	N/A	N/A	N/A	N/A	N/A
AAT Scrubber WB I	None	N/A	N/A	N/A	N/A	N/A
AAT Scrubber II	None	N/A	N/A	N/A	N/A	N/A

**CMS Performance Summary:**

N/A

**Description of Changes in CMS, Process or Controls since Last Reporting Period:**

N/A

Condition 8.6.1 requires:

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January – June	August 1
July – December	February 1


All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with condition 9.9.

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Sterigenics U.S. LLC has reviewed all applicable provisions of the operating permit. All liquid levels in the scrubbers are being monitored weekly and were within the levels established during the compliance test. U.S. EPA Region 5 approved monitoring requirements for the AAT Dry Bed Adsorbent System on December 19, 2002. There have not been any deviations from current applicable limits or standards. There also have not been any monitoring malfunctions during the reporting period from 01 January 2016 through 30 June 2016.

**Responsible Official Certification**


Based on the information and belief formed after reasonable inquiry, the statements and information in this report are true, accurate, and complete.

  
\_\_\_\_\_  
Kathleen Hoffman Sr. Vice President EH&S

28-Jul-2016  
\_\_\_\_\_  
Date

If you have any questions about this report, please contact Kevin Wagner at (630) 928-1771 or [kwagner@sterigenics.com](mailto:kwagner@sterigenics.com).

Kind Regards,



Kevin Wagner  
Director, Environmental Health & Safety

Pc: Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

USEPA (AR-17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
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**Sterigenics Management:**  
Mark Metzger – General Manager–Willowbrook, IL  
Kathleen Hoffman – Senior Vice-President, EHS  
Juan Segovia- Vice-President of Operations